> SPECIAL OUTLOOK ISSUE <

THE AGRICULTURAL SITUATION

NOVEMBER 1939

A Brief Summary of Economic Conditions

Issued Monthly by the Bureau of Agricultural Economics, United States Department of Agriculture

Subscription price, 50 cents per year; single copy, 5 cents; foreign price, 70 cents; payable in cash or money order to the Superintendent of Documents, Government Printing Office, Washington, D. C.

VOLUME 23 - NUMBER 11 - WASHINGTON, D. C.

IN THIS ISSUE

		Page			Page
Demand	*O. C. Stine*	2	Hogs	*P. Richards*	17
Credit	*N. J. Wall*	3	Sheep, Wool	*C. L. Harlan*	19
Farm Costs	*C. M. Purves*	5	Rice	*G. A. Collier*	20
Wheat	*J. A. Becker*	6	Meats and Lards	*W. O. Fraser*	21
Cotton	*C. H. Robinson*	7	Dairy	*E. E. Vial*	22
Tobacco	*C. E. Gage*	9	Poultry, Eggs	*R. J. Foote*	24
Feed Grains	*J. B. Shepard*	11	Vegetables	*G. Burmeister*	26
Seed	*G. C. Edler*	12	Fruits	*R. Royston*	28
Vegetable Oils	*R. M. Walsh*	13	Dry Beans	*J. E. Barr*	28
Beef Cattle	*C. A. Burmeister*	15	Horses, Mules	*M. R. Cooper*	30

OUTLOOK is for stronger demand for farm products in 1940. Larger volume of marketings, higher average prices, and increased farm cash income from marketings are in prospect. Government payments will be about the same as in 1939. Prices received by farmers probably will be higher relative to prices paid than during the last 2 years. Farm wage rates and other costs of production may average a little higher than in 1939. But receipts less expenditures will be larger. * * * Agricultural production for market in 1940 may be slightly larger than in 1939. Prospect is for increased output of meat animals and vegetables and smaller production of tobacco. Production of grains and cotton will depend largely on growing conditions which are unpredictable at this time. Output of dairy and poultry products will be affected by the relation of feed prices to prices of livestock products. Little change in feed prices is expected in view of ample supplies. * * * Meanwhile, there are abundant supplies of food, feed, and fibers to satisfy domestic and foreign requirements.

187469°—39——1

Demand and Price Outlook

THE demand for farm products in 1940 probably will be stronger than in 1939. The prices of some farm products may be little or no higher in 1940 than in 1939 on account of large supplies or weaker foreign demand, but the average of the prices of all farm products is likely to be higher than in 1939. The advance in the prices of farm products probably will be greater than the advance in prices farmers pay, thus increasing the buying power of farm products. The income of farmers from agriculture is likely to be higher than in 1939, on account of a higher general price level and an increase in the buying power of the consumers of farm products. These are the conclusions of the Demand Outlook Committee of the Bureau of Agricultural Economics.

IMPROVEMENT in demand for farm products in 1940 over that of 1939 is expected to be registered primarily in the domestic market. War conditions have stimulated business activity and price advances in the United States. Foreign purchases of materials for armament have been a strengthening factor in business activity in the past year. The outbreak of the war adds stimulus to these foreign demands. Furthermore, it has stirred up a latent demand for goods in the United States. The prolonged depression had caused many enterprises to postpone replacements for so long a period that they are now facing the necessity of some reconstruction and even extensions of plants in order to meet increases in requirements for goods or services. The outbreak of the war has served as a shock to awaken the managers of such enterprises to their real needs.

THE sharp advance in prices and in industrial activity occurring in the first few weeks after the outbreak of the war may not be maintained throughout 1940. As usual when prices begin to advance, many buyers become excited and rush orders. Plants speed up to fill the orders. In many cases the price advances go beyond the point that can be sustained, and orders slow down after the first rush to buy before prices advance. Business activity may reach a relatively high level before the end of 1939 and slow down to some extent in the early part of 1940. The volume of foreign war demands in 1940 is, of course, uncertain, but even an extension of the foreign armament demands of 1939, together with increased armament construction in the United States and the enlivened activity on account of domestic needs, would probably maintain industrial activity and national income in 1940 above the level of 1939.

FOREIGN demand for farm products from the United States in 1940 is dependent to a considerable extent upon the vicissitudes of the war in Europe. The courses of trade between the several European countries and their peacetime suppliers are being disturbed greatly by war alinements and by shipping conditions. The demand for some farm products is reduced by war conditions, while that for others is increased. High transportation costs and shipping losses may result in the concentration of the buying of some products in the nearest markets from which adequate supplies can be obtained. This would be favorable for marketing some of the farm products of the United States. But the governments engaged in war may reduce the purchases of other products as a matter of war economy.

THE immediate effects of war conditions may be noted in the case of a few commodities. For example, in the case of pork, the British market has lost supplies from some of the nearby European sources and must turn to the United States

to make up some of these losses. Prices in the United Kingdom have been marked up, and the market in this country has strengthened on the expectation of increased foreign buying. In the case of tobacco, on the other hand, the British buyers, having adequate supplies for a period, withdrew from our markets. This was only a temporary withdrawal. As in the previous great war, tobacco is considered to be practically a necessity.

The British takings of some fruits have been curtailed temporarily at least, and possibly some fruits will not recover a full market while war conditions prevail. In the case of wheat, Canada is in a better position than the United States to supply the needs of the British market. The same shipping conditions, however, affect many of the north European countries and may cause practically all of these importers to turn to Canada and to the United States for supplies as they use up supplies now on hand.

REAL price inflation does not seem to be in prospect for 1940. While the general revival of business activity and of the demand for commodities has a tendency to raise the general price level, the conditions making for general inflation, such as occurred in 1917 and 1918, do not now exist. The United Kingdom and France have abundant resources for the purchase of goods they need for carrying on the war without resorting to inflationary measures. Productive capacity in the United States is adequate for turning out the goods for both foreign and domestic requirements without abnormal extension, and while credit is abundant and cheap conditions are not such as to encourage an abnormal expansion in its use.

O. C. STINE.

The Credit Outlook for 1940

SLIGHTLY more credit will probably be used by farmers in 1940 than in 1939. The increasing demand for improved farm machinery, increasing expenditures for farm improvements, an anticipated strengthening of the market for farm real estate, and the increasing numbers of livestock on farms will be contributing factors. Loanable funds at relatively low interest rates are available to persons who can supply acceptable security.

Farm-mortgage credit—the most important type of agricultural credit—has been declining in volume since 1922, largely as a result of foreclosures and other distress transfers. During the last year or so, however, the decline has appeared to be approaching an end, and it is anticipated that the volume of farm-mortgage credit outstanding in 1940 will show little change from the approximately $7,000,000,000 outstanding in 1939.

New mortgage loans for the purchase or improvement of farms probably will increase during 1940, but the effect of this on the outstanding volume of mortgage credit is expected to be offset by the continued reductions through foreclosures and reversions and by increased payments on principal. Such payments are expected to be larger in 1940 than during recent years, partly because farm income is expected to increase and partly because the deferment privileges on Federal land bank and Commissioner's loans have expired.

PERSONAL and collateral loans to farmers—used mainly to purchase livestock and equipment and meet living and operating expenses—have been increasing at a moderate rate each year since 1936. The total outstanding loans of this type held by commercial banks and loans of a similar character held by units of the Farm Credit Administration on June 30, 1939, was

approximately $1,430,440,000. Such loans are expected to continue to increase during 1940. Numbers of livestock on farms are increasing, there is increasing use of machinery on farms, and increasing expenditures are being made for farm improvements. The current rate of increase in credit used for these purposes may be augmented during 1940 by rising costs of farm supplies and equipment and by prospects for increased farm income.

The outlook for stabilization loans on stored farm products, which are made or guaranteed by the Commodity Credit Corporation, will remain uncertain until it is announced whether loans will be made on the 1939–40 corn and cotton crops. Should loans on these crops be made, a substantial increase in the volume of outstanding loans on stored farm products is to be expected, since provisions already have been made for extending approximately $330,500,000 of the $435,600,000 of Commodity Credit Corporation loans outstanding on September 15, 1939.

CREDITS for rural rehabilitation and emergencies, including tenant-purchase loans under the Bankhead-Jones Farm Tenant Act, are expected to increase moderately during 1940. For the fiscal year 1939–40, $91,200,000 was made available for the Farm Security Administration's program of loans to low-income farmers for rehabilitation and other purposes.

The Emergency Crop and Feed Loan Section of the Farm Credit Administration had on July 1, 1939, $26,000,000 available for making crop and feed loans during 1939–40. This sum will be increased by collections from loans made during 1937, 1938, and 1939. For the tenant-purchase program of the Farm Security Administration $38,000,000 was made available.

The use of these various funds will raise the outstanding totals of credits advanced for rehabilitation, tenant purchases, emergencies, and community enterprises to a point considerably above the $439,165,000 outstanding on June 30, 1939. In addition, about $3,500,000 has been made available for loans during 1939–40 to farmers in arid and semiarid States for the purpose of supplying small water facilities. Funds also are available for a large variety of cooperative purposes.

N. J. WALL.

Prices of Farm Products

Estimates of average prices received by farmers at local farm markets based on reports to the Agricultural Marketing Service. Average of reports covering the United States weighted according to relative importance of district and States.

Product		5-year average, August 1909–July 1914	October 1909–13	October 1938	September 1939	October 1939	Parity price, October 1939
Cotton, lb	cents	12.4	12.1	[2] 8.53	9.13	8.73	15.87
Corn, bu	do	64.2	64.8	41.9	56.2	47.6	82.2
Wheat, bu	do	88.4	88.1	52.2	72.7	70.3	113.2
Hay, ton	dollars	11.87	11.49	6.72	7.17	7.31	15.19
Potatoes, bu	cents	69.7	65.0	51.0	69.4	66.4	86.5
Oats, bu	do	39.9	38.4	22.1	31.5	30.3	51.1
Soybeans, bu	dollars	(1)	(1)	.64	.73	.73	----------
Peanuts, lb	cents	4.8	4.6	3.23	3.44	3.36	6.1
Beef, cattle, cwt	dollars	5.21	5.09	6.33	7.07	6.97	6.67
Hogs, cwt	do	7.22	7.37	7.28	7.06	6.52	9.24
Chickens, lb	cents	11.4	11.5	13.6	13.6	12.7	14.6
Eggs, doz	do	21.5	23.8	27.1	20.6	22.9	[3] 32.7
Butterfat, lb	do	26.3	26.8	24.4	24.7	26.9	[3] 34.0
Wool, lb	do	18.3	18.5	[2] 20.1	24.3	28.7	23.4
Veal calves, cwt	dollars	6.75	6.80	8.28	8.92	8.88	8.64
Lambs, cwt	do	5.87	5.35	6.37	7.57	7.60	7.51
Horses, each	do	136.60	134.50	79.90	79.90	78.60	174.50

[1] Prices not available. [2] Revised. [3] Adjusted for seasonality.

Farm Production Costs in 1940

THE general level of prices of commodities and services used in farm production in 1940 will probably average a little higher than in 1939. In September the combined index number of prices paid by farmers for commodities used in production and of wage rates to hired farm labor was the same as a year earlier, or 124 percent of the 1910 average. Farm wage rates and prices of farm machinery, seed, and miscellaneous equipment and supplies were slightly lower than a year earlier, while prices of fertilizer and building materials were unchanged from a year ago. A marked advance in grain prices early in September was accompanied by advances in feed prices, and in mid-September feed prices were nearly 15 percent higher than in September last year.

The supply of workers available for farm work in October 1939 was slightly smaller than a year earlier, whereas the demand for hired labor was slightly higher. The recent increase in industrial activity has been accompanied by a sharp increase in industrial employment which may further reduce the supply of workers available for farm work in 1940. Increased farm income in 1940 is likely to strengthen the demand for hired laborers. While this may be offset in part by continued increase in farm mechanization and a fuller utilization of family workers, it is expected that farm wage rates will average higher in 1940 than in 1939.

PRICES of many commodities used in production are also expected to show moderate increases in 1940. Wholesale prices of raw materials used in the manufacture of commodities for farm production have advanced materially in recent months, and should these advances be maintained or should labor costs increase, the increased costs will no doubt be reflected in higher prices of finished products.

Farm machinery prices in September were about 3 percent lower than a year earlier and prices announced for some of the models of small tractors introduced this fall are lower than for similar 1939 models. In a recent announcement several manufacturers stated that existing quotations on farm machinery were applicable only to deliveries during the remainder of 1939. Should there be any increases after January 1 in prices of steel and other materials used in the manufacture of machinery, or in wage rates, an upward adjustment of machinery prices is probable. However, sharp advances are not anticipated.

Prices paid by farmers for building materials in September were unchanged from a year earlier. In recent weeks, however, wholesale prices of building materials, particularly lumber, have advanced slightly, which may result in a slight rise in the general level of retail prices to farmers during 1940.

WHOLESALE prices of mixed fertilizer in September were slightly lower than a year earlier and prices of fertilizer materials were about the same as in September 1938. Since a large part of the fertilizer materials to be sold to farmers during 1940 have already been purchased by manufacturers, any rise in wholesale prices of fertilizer materials from present levels should be only partially reflected in the retail price during 1940.

The United States is now much less dependent upon foreign supplies of fertilizer materials than in the 1914–18 war period. At that time nearly all of the potash salts and a large part of the mineral ammoniates were obtained from imports. In recent years the domestic output of potash salts has increased rapidly and in 1938 amounted to nearly two-thirds of domestic consumption. Domestic production of mineral ammoniates has also in-

creased considerably since 1918, so that ample supplies of fertilizer materials are available for 1940.

Prices of motor fuel and oil, binder twine, tires, spray materials, and harness are also expected to reflect the recent advance in wholesale prices of raw materials.

SUPPLIES of many of the important seeds are likely to be smaller for 1940 than the relatively large supplies in 1939, but probably will be above average. Market prices of seeds from the 1939 crop are now generally higher than a year earlier, and prices to farmers for 1940 planting are expected to be somewhat higher than in 1939. The recent advance in feed prices has raised the level of prices for most feeds materially above those prevailing a year ago, and prices throughout the 1939–40 feeding season are likely to remain higher than a year earlier.

C. M. PURVES.

Wheat Outlook for 1940

WHEAT prices were high during the World War, and large quantities were exported to Europe. Many people producing and selling wheat look for the present European conflict to result in a similar situation. In making plans for the 1940 crop, they should not overlook the fact that conditions at the beginning of the World War were greatly different from conditions at the start of the present conflict. The world supply of wheat in 1914 was approximately 3.5 billion bushels; now it is 5.4 billion bushels—the largest on record. Even though annual consumption has increased from 3 billion bushels in 1914 to 4 billion bushels in 1939, the large supply still creates an adverse price situation.

United States farmers face a greatly increased competition now, as compared with the World War period. Canadian wheat as well as wheat from Australia and possibly Argentina is expected to be favored in the important United Kingdom markets. Exports from the United States were large during early years of the World War as a result of short crops in Canada and Australia and the lack of competition from Argentina. But prices did not advance materially until after the war had been under way 2 or 3 years and then only when world production was small and the general price level was rising.

PROSPECTS for production of United States wheat in 1940 is a question in the minds of many people, for the weather has been extremely dry in the principal winter wheat areas of the Middle West. The Department has not yet estimated winter wheat plantings and probable production, but it appears that the acreage seeded will not be materially different this year than last.

Acreage last year was relatively small in comparison with other recent years. The inducements offered by the A. A. A. programs, the decline in wheat prices in the summer of 1938, and the generally unfavorable wheat outlook at planting time combined to reduce greatly the seedings for the 1939 crop to 64.6 million acres from the near-record acreage of 80 million acres seeded for 1938.

The wheat acreage allotments have been increased from 55 million acres for the 1939 crop to 62 million acres for 1940, but conditions for seeding and starting winter wheat generally have been unfavorable. So far this fall, soil moisture is much below normal and conditions appear to be less favorable than in any recent year.

Even before the winter wheat seeding season had drawn toward its close, reports to the Department of Agriculture indicated that most winter wheat growers planned to keep within

their 1940 acreage allotments. The movement of prices following the outbreak of war in Europe apparently had not generally affected seeding plans in the important winter wheat growing States. Precipitation has also been much below average in the important spring wheat States of the northern Great Plains. Many factors will, of course, have a bearing upon the acreage of spring wheat seeded. Included in these are early spring precipitation, the winter wheat prospects at spring wheat seeding time, wheat prices, and the somewhat larger wheat acreage allotments than in 1939.

IN Europe, the principal wheat market, wheat acreage for the 1940 crop is not expected to be much different than in 1939. Probable declines in the acreage seeded in the areas of military operations are likely to be at least partly offset by increases in neutral countries and in the United Kingdom. It is too early to appraise the probabilities for the 1940 Canadian wheat crop or the 1940–41 wheat crops of Australia and Argentina, but there is no reason to anticipate a material reduction in acreage in those countries. It is expected, therefore, that the world acreage in 1940 will not be greatly different from the acreage this year. With average yields, this would again result in a crop almost equal to prospective world consumption. Such a crop would not substantially reduce the large world carry-over stocks.

Farmers, of course, realize that during recent years the acreage of wheat has been increased materially in European countries formerly dependent upon imports. Elsewhere in the world there has been no tendency to decrease acreages. The result is that the present world area of about 275 million acres of wheat is about 3 percent larger than necessary, with average yields, to produce a crop equal to average annual disappearance. Naturally, should production in 1940 be large enough to take care of 1 year's consumption, it follows that the large carry-over stocks would not be materially reduced a year from now.

IT appears that very large world supplies will probably continue during the 1940–41 season, and that any improvement in world wheat prices will depend upon improvement in demand or a rise in world price level. Of course, the situation would be different if the world wheat acreage were sharply reduced or if the yield per acre for the 1940–41 crop should be small.

Wheat prices in the United States are expected to continue to average relatively high compared with prices in other surplus-producing countries so long as the Government loan and export subsidy programs continue and world prices remain low. The large quantity of wheat under loan is operating to support domestic prices.

JOSEPH A. BECKER,
Agricultural Marketing Service.

Fifty Million Bales of Cotton

WORLD supplies of all growths of cotton (carry-over on August 1, 1939, plus production) are estimated at somewhat less than 50 million bales for the current (1939–40) season. This is a little less than the record supplies of the two preceding seasons, but the total is still a tentative figure. The prospective supply for the 1940–41 season probably will not be materially less than this near-record volume, which is about a fifth more than the 10-year average (1928-37).

With the outlook for the months ahead overshadowed by a major European war, world consumption in 1939-40 is expected not to exceed

materially the 1939–40 crop, now estimated at approximately 28 million bales. It may be considerably smaller. Thus, the carry-over of all growths of cotton on August 1, 1940, is expected to approximate the near-record stocks of almost 22 million bales at the beginning of the current season.

IN the United States the 1940 national acreage allotment under the Agricultural Adjustment Act will be slightly less than the 28 million acres last season, when the area planted to cotton totaled just under 25 million. With yields per acre equal to the average for the 5 years 1934–38, an acreage equal to that last season would give a 1940 crop 1.1 million bales less than the 11.7 million running bales indicated (October 1) for 1939. Indicated yields per acre for 1939 are 45 pounds larger than the 10-year average and about 23 pounds more than the 5-year average. The high indicated yield for recent years is largely explained by a combination of factors. Among these are the selection of land better adapted to cotton production, soil improvement, better seed, improved cultural practices, and comparatively light boll-weevil damage.

The world carry-over of American cotton on August 1, 1939, totaled approximately 14.1 million bales, 400,000 bales more than the previous record volume of a year earlier. The average carry-over for the decade (1927–38) was 8.3 million bales. More than 10 million bales (excluding cotton exchanged for British rubber) out of the total stocks of American cotton is either owned or held as collateral against loans by the United States Government. Should loan stocks continue at about present levels the world carry-over of "free" American cotton on August 1, 1940, might be little larger than the small volume a year earlier. The total world carry-over of American cotton may be a little smaller at the beginning of next season than for the current season.

IN foreign countries commercial cotton production in 1939–40 is expected to be about 16.2 million bales of 478 pounds net. This is the third largest crop in history but considerably less than the peak production of 18.7 million bales in 1936–37. Present conditions indicate that the 1940–41 crop in foreign countries may be somewhat less than that for 1939–40, but it is likely to be well above the 10-year average crop of about 13.4 million bales.

Reductions in cotton acreages might reasonably be expected in producing regions where wartime controls may be used to increase food production and in those areas where cotton acreages are particularly responsive to changes in prices of food crops in relation to cotton prices. But such decreases may be offset to some extent by increases in China, and possibly Russia and a few other countries. With a reduction in the 1940–41 commercial cotton crop in foreign countries and a carry-over about equal to the 7.8 million bales for 1939 (10-year average, 6 millions), supplies of non-American cotton next season will be somewhat, although probably not materially, smaller than the 24 million bales indicated for 1939–40 (10-year average, 19.5 millions).

WORLD mill consumption of all growths in 1938–39 was nearly 28.5 million bales. This was the second largest in history but was substantially less than the peak consumption of nearly 31 million bales in 1936–37. Consumption in the United States during 1939–40 is expected to exceed materially the 6.9 million bales for 1938–39 and may approximate the record consumption of nearly 8 million bales in 1936–37. Such an increase, along with prospective increases in certain foreign countries in 1939–40, will offset some of the decreases expected in belligerent European countries. But there appears to be little likelihood that total world consumption of all growths in

1939–40 will exceed that for 1938–39, and it may be considerably smaller.

Most of any decrease in total world consumption in 1939–40 is expected to be in foreign growths. The indicated increase in supplies of American cotton this season, coupled with export payments and with the cotton-rubber exchange with the United Kingdom, should strengthen the competitive position of American cotton in foreign countries. Exports of cotton from the United States are expected to increase substantially as compared with the unusually small volume of only 3.3 million bales in 1938–39, despite difficulties in exporting to European countries. Exports during the first quarter of the current season were almost 50 percent larger than a year earlier. Although early season stocks of American cotton in the principal importing countries are comparatively small, the indications are that foreign consumption of American cotton may equal the comparatively small quantity of 4.5 million bales consumed in 1938–39. With a substantial increase in consumption of American cotton in the United States in 1939–40, world consumption of this growth now seems likely to exceed the 11.3 million bales for last season.

COTTON was selling in central markets at an average price of about 8.75 cents for Middling ⅞ inch in late October. The average price received by farmers in the United States as of mid-October was about 8.7 cents per pound, or a little more than a year earlier. The October parity price of cotton was 15.9 cents. If prices are maintained at current levels, returns to farmers from cotton and cottonseed from the 1939–40 crop as now indicated would be slightly larger than in the previous season. But Government payments with respect to cotton this season, although larger than average, will be much smaller than in 1938–39. And gross incomes including Government payments in the current season may be smaller than for any other year since 1932–33.

Carl H. Robinson,
Agricultural Marketing Service.

Tobacco Supply Troublesome

THE tobacco situation, present and prospective, contains more complexities than usual—improving domestic demand for the major tobacco products, oversupply of many types of leaf tobacco, exports impaired by war conditions, expedients to ameliorate the effects of halted British buying, heightened foreign duties on tobacco, referenda on marketing regulation, increasing foreign production, and so on. Out of this conglomeration of factors it is possible to discern some hopeful signs as an offset to some that are not hopeful.

Exports are encountering numerous difficulties. Shipping space is at a premium; freight and insurance rates are mounting; some of the countries which normally import American tobacco have been overrun, and others not directly involved in the war have been made almost inaccessible by blockades; and the major countries at war which retain access to the sea find it necessary to utilize their foreign exchange and shipping facilities for more important purposes.

On the domestic side, the more buoyant tone to business and industry is stimulating the demand for cigarettes and cigars, and this condition is likely to prevail through 1940. Increasing consumption of cigarettes will benefit the higher-priced grades of flue-cured, Burley, and Maryland tobacco. If there is an offsetting decline in the consumption of chewing or smoking tobacco it will be felt largely in lower-priced grades.

THE export outlook for flue-cured tobacco may be summed up as follows: Exports to the Far East are

likely to be somewhat smaller next year. England has temporarily stopped the importation of tobacco insofar as the use of dollar exchange is concerned. The announcement of this action precipitated a marketing crisis, and markets were closed from September 14 to October 9. During the interim a referendum on marketing regulation was carried, and constructive arrangements were effected by the A. A. A. and the Commodity Credit Corporation to finance the purchase of tobacco by dealers for British account when the markets reopened. These dealers assume part of the buying and handling costs, in return for which they obtain an option to purchase the tobacco which runs to July 1, 1941. Under these arrangements the usual export grades are to be bought in volumes and at prices equivalent to those affected by the stoppage of actual British buying.

The cessation of British buying means that manufacturers will cut deeper and deeper into their present 2-year supply of American leaf and probably increase their usage of Empire tobacco. In effect, while British stocks of flue-cured tobacco are being depleted abroad a reservoir of similar tobacco is being built up over here by which to make up the deficiency if and when the restrictions are removed and English concerns elect to exercise their options.

However, there is more to this situation than a mere delay in the timing of British imports of American flue-cured tobacco. Twice this year the English duty has been upped—by 2 shillings per pound each time. This fact alone would impair the position of our flue-cured tobacco in competition with that from Empire sources. Taken in conjunction with the stoppage of imports above referred to, there is bound to follow a considerable shift from American to Empire tobacco, and this shift may be of great importance in the future.

UNQUESTIONABLY there is an oversupply of flue-cured tobacco at this time—the largest crop and the second largest July stocks in history. July stocks next year cannot fail of setting an all-time high, so that if no improvement occurs in the export situation and if there is not an heroic cut in production, the marketing situation in 1940–41 will be bad indeed. Under these circumstances the action of growers in voting into effect a drastic control program for 1940 was most opportune. This, combined with the steadily improving domestic situation, may spell the difference between a fairly satisfactory market and disaster a year hence.

Burley tobacco usually goes through a cycle—from short supplies and high prices in one year to excess supplies and low prices some 2 or 3 years later, and back again to the starting point after the lapse of 2 or 3 years more. Such a cycle began in 1936, when, through small crops and vanishing stocks, an acute shortage of Burley tobacco impended. The run-away market that ensued (prices reached an all-time high) led to excess production in the 3 succeeding years, rapidly mounting stocks, and diminishing prices.

This year seems to mark the culmination of that phase of the cycle, although October stocks will be larger next year than this. It looks as though at least 2 years of curtailed production would be necessary to deflate stocks and achieve real improvement in the supply situation. In the absence of such curtailment next year the outlook is far from encouraging. Exports are not important, and only a moderate increase in domestic consumption is to be anticipated.

FIRE-CURED and dark air-cured tobaccos are in fairly good position. Stocks are not excessive and production does not appear to be too high. The fire-cured outlook is helped by the fact that supplies of good tobacco, especially snuff grades, were reduced by the widespread attack of wildfire

in Kentucky and Tennessee in 1938. The 1939–40 market at least will benefit from this shortage. On the other hand, exports will be reduced by the European war. There is nothing in the present situation to encourage increased production.

The outlook is varied as to the different cigar types, by reason of differences in the supply situation. Notwithstanding the upward trend in cigar consumption, current stocks and production indicate the need for moderate increases only in Northern Wisconsin binders, Pennsylvania and New York Havana Seed, and in Pennsylvania and Georgia-Florida fillers; a decrease in Southern Wisconsin, and little if any change in other types.

CHARLES E. GAGE,
Agricultural Marketing Service.

Outlook for Feed Grains and Livestock

THE outlook for feed grains has been materially improved by the continued increase in livestock numbers since the drought period. If growing conditions in 1940 are about average, if livestock numbers continue to increase as expected, and if the acreage of feed grains shows only the small changes now indicated, the relation of total livestock in this country to the total feed supply should be close to a normal balance next fall.

It appears probable that, barring unusual weather conditions, supplies of feed grain per animal unit will be somewhat further reduced next year and that the livestock-feed price ratio will be less favorable for livestock producers than it has averaged since the fall of 1937. During the next year or two the position of the grain farmer is expected to be somewhat improved relative to that of the livestock producer, but all producers of feed grain, hay, livestock, or live stock products should be benefited, directly or indirectly, by the expected further improvement in the incomes of domestic consumers. Exports of feed grains are not expected to be important in 1940, but some increase in exports of pork products may offset part of the expected increase in hog production and aid in maintaining the demand for feed grain.

CONSIDERING the country as a whole, it appears that the effects of the droughts are gradually disappearing. During each of the 4 lean years, 1933 to 1936, total grain production in the United States was less than in any of the preceding 10 seasons. Between January 1933 and the end of December 1934 livestock numbers were reduced about 16 percent. The last 3 years, 1937–39, have been marked by local droughts, but in the main the weather has been favorable for feed grains and other crops. As livestock numbers could not be increased immediately, record supplies of feed grains have accumulated, even though less than the usual acreage of feed grains was planted and production has averaged slightly less than before the droughts.

Now livestock numbers are catching up with the feed supply. Numbers will show an increase of about 7 percent during 1939. By the end of the year they will be back nearly to the predrought average and only about 5 percent below the January 1933 peak. The feed requirements of present livestock slightly exceed feed-grain production in 1939, and grain stocks on farms next July will show some reduction. However, regional differences in feed supplies and in the condition of ranges and pastures have caused adjustments in livestock numbers to vary markedly between areas, and it will be several years before the effects of the droughts have disappeared in some areas.

COUNTING all supplies of corn, oats, barley, and grain sorghums on farms or in prospect on October 1,

including crops still to be harvested and corn already sealed, and allowing for somewhat more than the usual tonnage of commercial feedstuffs as likely to be available, the total supply of feed in sight or in prospect is unusually large, probably the second largest since 1921. It is also unusually large in proportion to the number of livestock to be fed, and prospects point to a near-record volume of feed grains on farms next summer, probably only a few million tons below the exceptionally high figure of July 1939.

But the corn that has been sealed is not likely to be used extensively for feed this winter with prices as they are, and if this sealed corn is deducted, the remaining supply of feed grains on farms is only about equal to the average at this season in the predrought years and only slightly above average in proportion to the number of livestock to be fed. Excluding both this corn now sealed and such additional corn as is likely to be sealed as a result of loans on the 1939 crop, remaining supplies appear larger than in the drought seasons, but smaller than in other recent years except 1924.

FARMERS appear to be feeding at fully the usual rate per head, and although the level of feed-grain prices during the winter and spring months is expected to average moderately higher than in the last feeding period and regional differences in supplies and prices will be reflected in regional differences in feeding, the rate of feeding is expected to continue fairly high through the current feeding period. Present supplies and trends, therefore, point to a large July 1 carry-over of feed grains at the beginning of the new crop year, probably close to one-fourth of an average year's production, but somewhere around half of the total is likely to be corn sealed or held by the Government.

Hay supplies, including about an average crop and the second largest carry-over on record, are also large. In the country as a whole the hay supply per unit of livestock appears to be about 6 percent larger than the average during the predrought years, but in some important areas drought reduced hay production and necessitated early feeding. By May the big reserve will probably have disappeared and hay stocks on farms are likely to be down to somewhere around the usual carry-over in predrought years.

LOOKING ahead to the harvest of 1940, the big question is: What will the weather be? Acreage and yield changes, except those due to weather conditions, are expected to be relatively unimportant. The acreage of high-yielding hybrid corn is increasing, particularly in the central Corn Belt, but the tendency of corn yields to increase will probably be offset by smaller corn-acreage allotments. The acreage of hay crops will probably be maintained or increased.

There may be some substitution of feed grains for winter wheat where the dry fall prevented wheat seeding. On the other hand, there is likely to be a tendency, in some areas, to shift from oats and barley to spring wheat in response to recent price changes. These changes, together with shifts between oats and barley and between corn and grain sorghums, are expected to be relatively unimportant compared with the possible effects of variations in the rainfall.

JOHN B. SHEPARD,
Agricultural Marketing Service.

Clover and Alfalfa Seed

PLENTY of clover and alfalfa seed is available for expected planting requirements in the spring and fall of 1940. Supplies of these seeds (old and new crop) held by farmers and dealers, estimated at approximately 280,000,000 pounds, are somewhat smaller than in the fall of 1938, but

are a little larger than usual. An acreage for the production of these seeds in 1940 equal to that harvested for seed this year would appear to be fully ample for the sowing requirements in 1941.

Prevailing prices of red- and alsike-clover seed are higher than in 1938, prices of sweetclover seed are about the same as last year, alfalfa seed prices are slightly lower. The higher prices of clover seed will tend to decrease the demand next spring. The rise in grain prices following the declaration of the European war will also tend to decrease the acreage of clover and alfalfa, not only for seed production but also for hay.

Imports of red- and alsike-clover seed were small during the fiscal year ended June 30, while those of alfalfa and sweetclover were much above average. Imports of red-clover seed are expected to be small during the present fiscal year, but imports of alfalfa seed may be above average. Alsike-clover seed imports may be above average despite the small crop in Canada.

PRODUCTION of red-clover seed in 1939, estimated at approximately 80,600,000 pounds of thresher-run seed, is about 27 percent smaller than the large crop of 1938 but about 36 percent larger than the 10-year (1928–37) average. Decreased production this year is attributed to a reduction in acreage from last year, which was next to the largest on record. Decreases in production are most marked in the eastern portion of the red-clover seed producing area.

The 1939 production of alsike-clover seed, estimated at 19,500,000 pounds, is about 24 percent smaller than the 1938 crop, but about average. Decreased production in 1939 is attributed to the dry weather in the summer and fall of 1938 in a number of important districts.

Production of sweetclover seed in 1939, estimated at about 63,200,000 pounds, is expected to be about 10 percent larger than in 1938. Drought and grasshoppers again reduced the crop in some sections, but yields per acre were expected to average a little above those of 1938.

Production of alfalfa seed in 1939, estimated at 74,100,000 pounds, is about 24 percent larger than in 1938 and 31 percent larger than the 10-year average. The increase over the 1938 production is most marked in the States that produce northern-grown seed.

G. C. Edler,
Agricultural Marketing Service.

Fats, Oils, and Oilseeds

PRESENT indications are that domestic and European demand for food and soap fats will increase considerably in 1940 as a result of increased industrial activity in this country and the war in Europe. Despite large domestic supplies, prices of edible fats and oils (and oilseeds) are expected to be somewhat higher than in 1939.

The European demand for paint oils probably will be reduced in 1940, although the demand in the United States may be maintained near present levels. World supplies of flaxseed and linseed oil are expected to be larger than in 1939; prices for these products probably will average lower than in the current year, unless there should be a material advance in the general price level next year.

EXCEPTING paint oils, domestic supplies of fats and oils for 1939–40 are the largest on record. Hence the need for imports of vegetable oils and oilseeds is considerably less than a year earlier, when net imports of fats, oils, and oilseeds in terms of crude oil totaled about 1.5 billion pounds.

Production of fats and oils from

domestic materials in 1939–40 probably will total more than 8.5 billion pounds, or at least 5 percent more than the large production of 1938–39. Stocks of fats, oils, and oilseeds in terms of crude oil on July 1, 1939, totaling about 2.5 billion pounds, were 3 percent larger than a year earlier. Most of the increase in the domestic output in 1939–40 will be in the production of lard, soybean oil, linseed oil, and grease. Production of cottonseed oil may be slightly less than in 1938–39.

CONSUMPTION of fats and oils in the United States the last 20 years has increased at a greater rate than domestic production. The result is that import requirements for vegetable oils and oilseeds are considerably larger now than in the early years of the World War. Nevertheless, lard continues to be exported, and with the marked increase in production of soybeans since 1934, a surplus of soybeans also is available for export. Present indications are that the United Kingdom will increase its takings of American lard next year. With improved prospects for exports, prices for lard may regain their former premium over prices for cottonseed and other vegetable oils, lost in recent months because of the large surplus in domestic lard supplies.

Since 1933, the United States has exported very little lard to Germany. Hence the present British blockade of Germany can have no serious effects in reducing our export trade in lard. The demand for American lard in the United Kingdom probably will be increased because of reduced lard production in western Europe and the difficulties that will be experienced in importing oilseeds and vegetable oils from distant colonial possessions and the Far East; the production of whale oil by the United Kingdom, moreover, may be suspended for the duration of the war.

In 1938, the United States exported 234 million pounds of lard (including shipments to noncontiguous territories), more than half of which was taken by the United Kingdom. In August 1939, before the outbreak of war, it was estimated that exports of lard for the calendar year 1939 would total about 330 million pounds.

ASSUMING that imports of vegetable oils and oilseeds into the United States from South America and trans-Pacific sources will not be restricted by the present war, and that import prices will be comparatively low, it is probable that at least 600 million pounds of American lard will be available for export in 1940. The principal market for this lard would be the United Kingdom.

In addition to lard, exports of soybeans and soybean oil to Europe are likely to be increased in 1940. Some cottonseed oil, also, may be exported. With reduced lard production, a smaller cotton acreage, and excise taxes on several foreign oils, cottonseed oil has been imported on balance by the United States during the past 5 years.

THE outlook for domestic oilseeds depends to some extent on the outlook for feeds, since oilseed cake and meal is the chief byproduct obtained from crushings of cottonseed, flaxseed, and peanuts, and is the principal product of soybeans.

Total supplies of high-protein feeds available for domestic utilization in 1939–40 are expected to be larger than a year earlier and possibly the largest on record, chiefly because of increased production of soybean and linseed cake and meal. And supplies of feed grains for 1939–40 are expected to be slightly larger than a year earlier.

On the other hand, the number of livestock to be fed in 1939–40 will be considerably larger, and the demand for feedstuffs generally probably will be stronger, than in 1938–39.

DOMESTIC supplies of cottonseed for the 1939–40 marketing season are indicated to be slightly smaller

than those of a year earlier and less than average. Although supplies of competing oils and feeds are large, the demand for cottonseed oil, hulls, and meal is expected to be somewhat stronger this season than last. And prices of cottonseed products are likely to average higher than a year earlier.

With the continuation of the peanut-diversion program, returns from the 1939 peanut crop are expected to compare favorably with those from cotton and other competing crops. The peanut crop in 1939 was slightly smaller than the record crop of 1938. At least 250 million pounds of peanuts are expected to be available for crushing in the 1939–40 season.

SOYBEAN production for 1939 is the largest on record. But with improved demand for high-protein feeds and edible oils, prices of soybean products and soybeans probably will be at least as high as those for the 1938–39 season. It is expected that more soybeans will be exported in 1939–40 than a year earlier.

World supplies of flaxseed are about the same as in late 1938. But an increase in the Argentine crop to be harvested in late 1939 and early 1940 is indicated. The acreage of flax seeded in the United States in 1939 was the largest since 1932, and a further expansion in domestic flax acreage seems probable for 1940. Because of the war, the European demand for flaxseed is expected to be weaker in 1940 than a year earlier, but demand in the United States probably will be well maintained, with no material change in the volume of building construction.

Continued difficulties in securing shipments of tung oil from China because of military operations in that country will tend to support the demand for flaxseed and linseed oil in the United States. With larger world supplies and a somewhat weaker world demand, however, flaxseed prices in 1940 may average lower than in 1939 unless commodity prices generally score a sharp advance.

ROBERT M. WALSH.

The Beef Cattle Outlook

CATTLE producers in 1940 are faced with the prospects of a further slight reduction in cattle slaughter, a somewhat stronger demand for meats as a result of a moderate increase in consumer buying power, increased competition from larger supplies of pork, and continued expansion in cattle numbers.

Cattle slaughter has been decreasing gradually since 1936, when a new record in commercial slaughter was established. Cattle numbers, on the other hand, have been increasing since 1937, following the reduction of more than 8,000,000 head during and following the drought of 1934. Combined slaughter of cattle and calves under Federal inspection in 1939 is expected to total about 14,400,000 head, or about 870,000 less than in 1938, and 2,600,000 less than that in the record year of 1936. The decrease from 1938 has been mostly in cows, heifers, and calves, as steer slaughter probably will about equal that of last year.

PRESENT indications are that steer slaughter in 1940 may not be greatly different from that in 1939, but slaughter of other cattle and of calves may be reduced somewhat further. Most of the reduction in cattle marketings next year is likely to occur in the western range and Great Plains States, where cattle numbers were reduced greatly as a result of the droughts in 1934 and 1936. If grazing and feed conditions in that area are near average next year, some expansion in herds is likely to take place. Feed production in this area in 1939

was far below average, and ranges and pastures were short, thus tending to prevent any increase in cattle numbers in the area.

In most other regions cattle numbers increased in 1939, and the total for the entire country January 1, 1940, is expected to show an increase of about 2,000,000 head over a year earlier. Numbers in the Corn Belt States east of the Mississippi River on that date are expected to be the largest on record, totaling perhaps 2,000,000 head more than on January 1, 1934, when cattle numbers for the entire country were the largest of record. These States probably will market considerably more cattle in 1940 than in 1939, but the increase probably will not offset entirely the decrease in marketings expected in the Western States.

THE number of cattle to be fed for market this winter and next spring is expected to be somewhat greater than the number fed a year earlier. This is indicated by the large increase in shipments of stockers and feeder cattle into the Corn Belt, both through public stockyards and direct from the range. Most of the increase in the number of cattle fed is expected to be in the States east of the Missouri River, with the largest increase occurring in the central Corn Belt. The relatively small corn production in the area west of the Missouri River will restrict feeding in that section. Feeding operations in nearly all of the Western States will be on a smaller scale than in the previous year, but not much change appears in prospect in Texas.

Marketings of grain-fed cattle during the late winter and early spring of 1940 probably will be larger than the relatively small marketings of such cattle in the corresponding period a year earlier. But during the summer and fall of 1940 the number marketed may not be greatly different from that in the same periods of 1939.

PRESENT indications are that total imports of cattle in 1940 will be smaller than the imports this year, which were the largest for any year since 1919 and more than double those of 1938. Mexico supplied the largest number of the cattle imported in 1939, but they were mostly animals weighing between 200 and 700 pounds. Most of the cattle weighing over 700 pounds were imported from Canada. Unsettled economic conditions and poor ranges in Mexico, together with relatively high prices for cattle in the United States, accounted for the relatively large movement from Mexico. Unless faced with another season of poor range conditions, cattlemen in Mexico are likely to hold back cattle in 1940 for replacement purposes. Canada also probably will need to rebuild its herds in those areas where droughts necessitated curtailment.

Little change in the imports of canned beef is indicated unless shipping difficulties would cause a reduction in the movement of chilled beef from South America to Great Britain. In such event, imports of canned beef into the United States might increase considerably.

PRESENT indications are that the direct effects of the European war on the domestic cattle situation probably will be of only minor significance, as it is not probable that any considerable volume of beef will be exported from the United States.

The chief effects of the war on the United States cattle industry probably will be through (1) improvement in domestic demand for meats as a result of general increases in industrial activity and consumer income, only part of which, however, will be an outgrowth of the war; (2) an increase in the foreign demand for hides; and (3) increased exports of pork, causing total domestic supplies of meats to be smaller than they would otherwise be. The improvement in demand may be most pronounced in the last half of 1940.

CATTLE prices in 1939 averaged higher than in 1938, but prices of the better grades of steers in early

October were below those of a year earlier, while prices of the less desirable grades were higher. With a stronger consumer demand indicated for 1940 and probably fewer cattle for slaughter, cattle prices may average slightly higher than in 1939. Relatively high prices for hides will also tend to strengthen cattle prices. The competition from the increased supplies of pork, on the other hand, will tend to offset some of the improvement in consumer demand.

With prospects for relatively large marketings of grain-fed cattle in the next 6 months, a material increase in prices of the better grades of slaughter cattle does not seem probable, even though there may be some improvement in the consumer demand for meats. Hence it is possible that prices of the better grades of slaughter cattle in the first quarter, and perhaps the first half, of 1940 may average lower than those of a year earlier. But in the summer and fall of 1940 prices of such cattle may average considerably higher than in the summer and fall of 1939. A considerable part of the prospective improvement in the demand for meats is likely to take place after the spring of 1940.

With prospects for relatively large supplies of grain-fed cattle in 1940, together with reduced marketings of cows and heifers, prices of the lower grades of slaughter cattle and of stocker and feeder cattle are expected to continue high in relation to prices of fed cattle.

CATTLE prices during the past few years have been maintained at considerably higher levels than would have prevailed had there been no shortage of hogs. Hog production is now back to the predrought level, and total production of meats in 1940 will be above average and may approach record proportions. Under these conditions it would seem that cattle producers might well utilize the coming period of improved demand to market fairly heavily rather than to increase numbers and potential production by building up herds in a period of high prices.

C. A. BURMEISTER.

The Hog Outlook for 1940

PROBABLY for all of 1940, farmers can expect hog marketings to be large, much larger than in any of the past few years. But consumers in the United States generally will have more money to spend for meats and lard in 1940 than they had in either 1938 or 1939. Takings of pork by foreign countries will be larger in 1940 than in the preceding year. For the year as a whole, hog prices may average lower or at least no higher than in 1939, but with larger marketings farmers will receive a larger total income from hogs than they received this year.

Consumer demand for hog products in the United States in 1939–40 will be stronger than in 1938–39. This increase in consumer demand will be a reflection of the probable higher level of industrial activity and employment which will result in an increase in incomes of consumers. Stronger foreign demand for pork and lard also is in prospect, as a result of the effects of the European war upon European supplies. The expansion in pork exports is expected to be greater than the increase in lard exports.

But the effects on hog prices of the improvement in domestic and foreign demand probably will be offset largely, if not wholly, by the increase in supplies of hogs for slaughter during 1939–40. Present indications are that prices for hogs will average lower than a year earlier in the first half of the 1939–40 marketing year and higher than a year earlier in the last half of the year.

THE number of pigs raised in the United States has increased materially in the past 2 years, following a very low level of production resulting from the droughts of 1934 and 1936. The total pig crop for 1939 is about 83 million head compared with about 71 million head in 1938 and the small pig crop of about 55 million head in 1935.

The decrease in hog production which followed the 1934 drought was largely in the Corn Belt, especially in the Western Corn Belt where the effects of the 1934 drought were most severe. In the Western Corn Belt (west of the Mississippi River) the number of pigs raised in 1935 was nearly 50 percent smaller than the average of the 5 preceding years. Some increase in the number of pigs raised occurred in 1936, but production was again curtailed in 1937 because of the effects of the drought of 1936. The large production of corn and other feed crops in the past 3 years has brought the number of pigs raised back to the level prevailing before the 1934 drought.

The increase in the 1939 pig crop over that of 1938 will be reflected in considerably larger slaughter supplies of hogs in 1939–40 than in 1938–39. Inspected hog slaughter in the 1939–40 marketing year which began October 1 probably will total around 47 million head, which will be about 7 million head larger than the slaughter of 1938–39. Slaughter in 1939–40 will be a little larger than the (1929–33) predrought average. Average weights of hogs marketed in 1939–40 probably will continue heavy.

IN view of the abundant feed supplies and the prospects of a hog-corn ratio about average or somewhat above average, a further increase in the number of pigs raised is expected in 1940. There is little likelihood, however, that the increase in the pig crop in 1940 will be anything like so great as that which occurred in 1939. The fact that a considerable part of the 1939–40 corn supply will be held under loan or held by the Government will be an important factor tending to prevent a large increase in production in 1940.

The 1939 pig crop is as large as, or larger than, the predrought average in all regions, except in the area of the Corn Belt west of the Missouri River. Feed crop production is again short in this area, and only a moderate increase in the number of pigs raised there can be expected in 1940. In most other areas it also seems probable that only a moderate increase in hog production will occur in 1940, since production in these areas is already at a relatively high level. The 1939 pig crop is considerably above average in the eastern Corn Belt and in the Southern States.

OF all farm products, hogs are the only one for which a significant expansion in the export outlet is probable for 1939–40 as a result of the European war. But even as to hogs, prospective improvement in domestic demand resulting from increased industrial activity and enlarged consumer incomes is expected to be much more important as a price-supporting factor than the increase in foreign demand. Even with an increase in exports, our exports of pork probably will not exceed 4 percent of domestic production, and lard exports will be less than 20 percent of our total lard output.

One of the effects of the war will be to reduce imports of bacon and hams into Great Britain from continental Europe. British imports of bacon and hams from Poland and probably from other Baltic countries already have been cut off. In 1938 British imports from such countries amounted to about 89 million pounds. Eventually, but probably not immediately, hog production in Denmark and the Netherlands will be reduced as imports of feed into those countries are curtailed by war conditions. This will result in a further reduction in British supplies of bacon from continental Europe.

In 1938 the total imports of bacon and hams into Great Britain from Den-

mark and the Netherlands amounted to 438 million pounds. United States is the only pork-exporting country outside Europe that has supplies sufficiently large to offset a substantial decrease in British imports from the European Continent. In early September the British quotas on imports of bacon and hams, in effect since late 1932, were suspended.

Another effect of the war has been to reduce United States imports of pork greatly. A major part of the pork imports in recent years have been canned hams from Poland. Shipments of these have virtually ceased since early September. In the first 8 months of 1938 total pork imports amounted to about 36 million pounds, while pork exports totaled about 89 million pounds.

THE short hog supplies from 1935 through 1938 resulted in a much smaller proportion of the total income from livestock going to hogs in that period than in previous years. The percentage of total livestock income from hogs in 1939 will again be relatively small, despite the fact that hog slaughter this year is the largest since 1934. Apparently the percentage change in prices of hogs resulting from the short supplies was not so great as previous decreases in supplies, which were relatively less, would have indicated.

Whether the proportion of the total livestock income going to hogs will return to the predrought level as the percentage of hogs in the total livestock slaughter increases to this level is, of course, uncertain. But this factor will have an important bearing upon the effects of the increases in hog marketings upon hog prices in the next year or two.

PRESTON RICHARDS.

Favorable Outlook for Sheep

IN some important respects the outlook for the sheep industry in the next few years seems rather more favorable than for either the cattle or hog industries. Looking ahead through 1940, the prospects for the sheepman—grower or feeder—seem to be somewhat the better.

From the standpoint of numbers, the sheep industry has not changed much during the last 9 years. The number of stock sheep in the native sheep States has been quite stable at about 14 million head. The steadily expanding numbers in Texas have about offset the downward trend in the other western sheep States, the total for all Western States ranging between 32 and 34 million head. Nor is there evidence pointing to any material increase in stock sheep during the next few years.

Numbers in the western sheep States, excluding Texas, are dependent somewhat upon the numbers permitted on the public domain and the national forests. The tendency of permits during the next few years is more likely to be downward than upward. Any further expansion in Texas will probably be moderate.

Although numbers in the native sheep States may expand somewhat, an increase of more than 1 percent a year for the country as a whole during the next few years seems unlikely. On the other hand, hog production has increased rapidly the last 2 years and may make a further increase next year. Cattle numbers, also, are definitely on the upswing of the cycle, with a material increase fairly certain for 1939 and an even larger increase in prospect during 1940.

THE price of wool is an important factor in determining the value of both stock sheep and of slaughter sheep and lambs. The war situation is expected to be more of a price-strengthening factor for wool than for any other important agricultural prod-

uct. Also, during the last few years the supply of hogs has apparently been less of a strengthening factor for lamb prices than for prices of other classes of livestock; consequently, it is quite probable that the increased supplies of hogs during the next few years will be less of a weakening factor on lamb prices than on the prices of other livestock.

Probably more lambs will be on feed for market on January 1, 1940, than a year earlier, with larger numbers in the Corn Belt but fewer in the Western States. The increase in lambs, however, will be relatively much less than the increased supply of hogs during the early months of 1940, and probably relatively smaller than the increase in supplies of fed cattle.

While improved consumer purchasing power during the first half of 1940 will increase consumer expenditures for all meats and thus tend to offset the effect of increased supplies on prices, this strengthening factor may be reflected more in lamb prices than in those of other meats. Also the relatively high level of wool prices and the wool-supply situation which is favorable for a continuation of a high level during much of next year will help to hold lamb prices above a year earlier.

THE size of the lamb crop next year cannot now be forecast with any certainty, but some of the factors affecting the size of the crop are already fairly evident. While weather conditions during the lambing season is the most important factor determining the percentage lamb crop, the condition of ewes at breeding time and the feed supply during the winter are of considerable importance, especially in the western sheep States.

The condition of ranges in most of the Western States on October 1 was rather low and for the region as a whole was the third lowest for the date since 1922. The prospects for winter range feed in general are not favorable and are distinctly poor over much of the important winter sheep range. The condition of sheep on October 1 was also low and there is little chance for improvement before winter.

It seems probable that ewes will be in below-average condition at lambing time, even though feeding of concentrates is rather heavy. If weather is no worse than average at lambing, the losses of lambs may be rather heavy. In short, the chances are rather large that neither the percentage nor the actual lamb crop in the Western States in 1940 will be as large as in 1939.

THE wool outlook for 1940 is also fairly favorable. Heavy consumption and light imports of apparel wool in 1939 have reduced stocks to a rather low level. Even with much heavier imports during the first quarter of 1940 than in the corresponding period in 1939, stocks of wool next March, at the beginning of the new wool season, will be relatively small. World wool prices are likely to be high under war conditions, and so long as we are on a freely importing basis, these high prices and the increased cost of importing wool caused by high shipping costs will be reflected in prices of domestic wools. Production of wool in the United States in 1940 will be little different from 1939.

C. L. Harlan,
Agricultural Marketing Service.

Large Supply of Rice

SUPPLIES of rice for the 1939–40 season by present indications will be fully as large as last season. Unless domestic utilization increases or exports are larger than are now indicated another large carry-over at the close of the season is in prospect. Supplies of southern rice may slightly exceed the

unusually large stocks of the two previous seasons with a slightly smaller crop offset by a record carry-over of old rice. A large carry-over also places California supplies slightly above those of last year when a special program was inaugurated to market the surplus.

The disappearance or distribution of southern rice in 1938-39 fell nearly 650,000 pockets, or bags, short of that of the previous season, while the distribution of California rice was only a little larger than a year earlier despite relatively low prices. Exports during the 1938-39 season were the largest in several years, reflecting the increased takings by Cuba. Shipments to insular possessions and domestic utilization were smaller than either of the previous two seasons. Prices averaged about 50 cents per 100 below those for the 1937 crop.

INCREASED employment and a broadening in domestic demand during the 1939-40 season may result in some increase in domestic utilization and possibly in shipments to insular possessions. Export demand, however, upon which the American rice industry must depend as an outlet for surplus stocks, may be no greater than in 1938-39. While high ocean freights and increased rates for war-risk insurance place United States exporters in a more favorable position for exports to Cuba and Central and South American countries, this advantage may be offset by increased competition from oriental rice as the result of a more limited market for this commodity in Europe.

Domestic rice markets advanced sharply early in September, influenced by speculative activity following the outbreak of the war in Europe, but a good part of the advance had been lost at the middle of October. At the outbreak of the World War in 1914 the United States was a net importer of rice, and little change occurred in exports, imports, shipments to insular possessions, or in domestic utilization during that or the next 2 years. Prices remained relatively low during this period and did not advance materially until 1917, 3 years after the war started.

G. A. Collier,
Agricultural Marketing Service.

Increased Production of Meats and Lard

THE per capita production of meat and lard in 1940 promises to be the largest since 1933 and about equal to the 1929-33 average. This increase in supplies is expected to be offset, however, at least in part, by the improvement in demand likely to result from some increase in consumers' incomes and in export demand.

The indicated increase in production of meat and lard for 1940 is a reflection of the continued recovery underway since the drought of 1934 drastically reduced the number of meat animals. The total dressed weight of livestock slaughtered under Federal inspection in 1935 was 24 percent less than the previous year and 23 percent below the 1929-33 average. Production of meat and lard increased in the years 1936 through 1939 but was continuously below the predrought 1929-33 average. In 1939, however, production was only about 1 percent below that average. A further increase is expected in 1940.

Most of the increase in meat and lard production since 1934 has been in pork and lard, and all of the expected increase in 1940 over 1939 is expected to result from the increase in hog slaughter.

THE number of cattle on farms has been increasing in the past 2 years, and the number on farms January 1, 1940, is expected to be larger than the average of the past 20 years; but

numbers will still be under the peak reached in early 1934 preceding the drought and the emergency cattle purchase program.

While some further restocking of farms and ranges is anticipated, it is not expected to be sufficiently extensive to result in a decrease in cattle slaughter. Market supplies of cattle in 1940 are expected to include a relatively high percentage of fed cattle of the better grades, probably even a higher percentage than in 1939. Not much change is expected in the production of lamb and mutton.

AN improvement in demand for meats is expected to counterbalance, at least in part, the expected increase in supplies. Based on the prospective increase in industrial activity and consumer incomes, the demand for meats in 1940 may equal 1937. The improvement is expected to become more pronounced as the year goes on.

The foreign demand for pork and lard is also expected to be somewhat better than in 1939. But even should there be a substantial increase in exports these exports are expected not to exceed 5 percent of the total domestic production. The prospective improvement in domestic demand, is therefore, much more significant than any improvement likely in the export demand.

ONE result of the war in Europe to date has been a substantial decrease in imports of pork products. These products have consisted very largely of canned hams from Poland the past few years. With the supply from that source virtually shut off, domestic processors are endeavoring to supply the demand with "Polish style" canned hams domestically produced.

It is improbable that the number of Mexican cattle imported will be as large as in 1939, and it is likely there will be a sufficient demand for stock cattle in western Canada to reduce the number available for export to the United States.

PRODUCTION of federally inspected meats, including lard, per capita in 1940 will probably about equal the 1929–33 average of 108 pounds per person and will be the largest since 1933. In 1935 it totaled 81 pounds, but by 1939 it had increased to 100 pounds. All of the increase during the past year has been in pork, including lard. There was a slight decrease in production of beef and veal, lamb and mutton.

W. O. Fraser,
Agricultural Marketing Service.

The Dairy Outlook for 1940

PRINCIPAL factors in the dairy outlook are the increase in the number of cows, the general rise in commodity prices, and the improvement in business.

The number of milk cows on farms reached a peak in 1934. Following this peak there were 4 years of liquidation, and numbers declined 8 percent. The relatively low prices of cows and the droughts in 1934 and 1936 caused many farmers to reduce the size of their dairy herds. This decline in numbers has not only been checked but there were small increases in 1938 and 1939. Further increases are in prospect for 1940 and 1941.

While the number of milk cows has shown relatively little increase in the last 2 years, there have been marked increases in the number of heifer calves saved for milk cows.

On January 1, 1939, the number of heifers 1 to 2 years old was about 5 percent higher than a year earlier. The number of heifer calves was about the same as the peak on January 1, 1934. There were further increases in numbers during 1939.

It is expected that by January 1,

1940, there will be about 5,400,000 head of heifers 1 to 2 years old on farms. This would be the largest number of heifers in relation to cows in the 20 years of record and decidedly more than needed for ordinary replacements.

THE number of heifer calves being saved for milk cows on January 1, 1940, is expected to be about 5,800,000 head. This is 3 percent more than a year earlier and a new peak. Heifers in this age group would ordinarily be added to milking herds in 1941. The number of heifers and heifer calves on farms is decidedly more than needed for ordinary replacements to dairy herds in 1940 and 1941, and is large enough to provide a marked increase in milk cow numbers in those years with average rates of culling.

The actual increase in milk cow numbers will depend to a large extent on the rate of culling. During the last 20 years the number of cows eliminated from herds has been much more variable than the number of young stock added to herds. In 1938 and 1939 the rate of culling appears to have been considerably above average. In areas where a considerable proportion of the cows milked are of dual-purpose type, there may be some shifting of cows from a milk-cow to beef-cow classification, depending on the relative prices of butterfat and beef. Prices of beef have been high in relationship to butterfat during 1939.

IF production of feed crops is about average or better it seems probable that the increases in number of milk cows in 1940 and 1941 will be considerably greater than in the past 2 years. An increase in the number of milk cows per capita is expected.

The total supply of feed grains and byproduct feeds for the 1939–40 season is estimated to be 3 percent larger than a year earlier, and the largest since 1932–33. In the past year there has been a marked increase in the number of grain-consuming animals. The feed supply per animal unit for the 1939–40 season (July–June) is estimated to be 1,902 pounds. Except for the 1938–39 season, when the supply per animal unit was 1,980 pounds, this is the largest in more than a decade and 10 percent above the average for the 8 years prior to the 1934 drought. Even if the corn sealed under the loan program up to September 1 is excluded, the supply per animal unit is above average.

The supply of hay per hay-consuming animal unit for the current season is estimated at 1.27 tons, compared with 1.33 tons a year earlier and the 10-year average before the 1934 drought of 1.18 tons. In some sections feed production was greatly curtailed by drought in 1939, but for the country as a whole feed supplies per unit of livestock are above average but not as great as a year earlier.

MILK production during the early fall of 1939 was curtailed by the widespread drought. For the winter of 1939–40 it is expected that milk production may be about as large as a year earlier. The number of cows on farms will be somewhat larger, and apparently ample supplies of feed are available.

Milk production on farms in 1938 was estimated at 107 billion pounds. This was nearly 4 percent larger than in 1937 and considerably higher than the preceding peak in 1933. Based on preliminary indications it appears that production in 1939 will be somewhat higher than in 1938. It seems probable that with increases in the number of milk cows, milk production will continue gradually upward so long as feed supplies are ample.

Prices of dairy products reached the recovery peak in the latter part of 1937, but declined rapidly in the first part of 1938. This decline was due primarily to the general decline in commodity prices and business from the 1937 peak, and to the increase in production of manufactured dairy products. During the summer and fall of 1938 large purchases of butter by

the Dairy Products Marketing Association supported prices. During January and February 1939 purchases by the Federal Surplus Commodities Corporation supported the butter market. From early March 1939 until late July 1939 no market purchases of butter were made by governmental agencies.

DURING the summer of 1939 prices of manufactured dairy products were in many cases the lowest since 1933. The general level of commodity prices was low and supplies of dairy products (production plus stocks) were unusually high. Since midsummer, consumption has been relatively high compared with production and stocks are much lower than a year ago. Business has improved, and there has been a general rise in commodity prices. These factors have strengthened the prices of dairy products. Further improvement in prices of dairy products will depend on the improvement in business and commodity prices generally.

Ice cream, fluid milk, and cream are the dairy products the consumption of which is most affected by changes in urban prosperity. The improvement in business which has occurred and is in prospect will tend to stimulate ice-cream consumption.

Receipts of milk at the three principal eastern markets, Boston, New York, and Philadelphia, indicate that consumption in these markets during the first 9 months of 1939 was higher than in 1938 and also higher than the peak in 1930. Cream receipts at these markets in 1939 were also higher than in 1938 but decidedly less than in 1930–31. With improvement in business, some further increase in consumption of fluid milk and cream appears in prospect.

Increases in consumption of these products will tend to offset the effects of somewhat higher milk production on the output of principal manufactured dairy products.

Total consumption of dairy products in 1939 was larger than in 1938, even though there was relatively little change in total milk production. By the end of 1939 stocks of dairy products will be decidedly lower than a year earlier.

The increase in the number of cows indicates the probability of some further increase in milk production. The general rise in commodity prices and business, however, are important factors indicating improvement in the dairy situation and will probably more than offset the effects of an increase in total milk production on prices of dairy products.

E. E. VIAL.

Outlook for Poultry and Eggs

THE outlook is for larger supplies of poultry and eggs during the remainder of 1939 and the first half of 1940 than a year earlier. During the latter part of 1940 supplies may be somewhat smaller than in 1939. The effect of these larger supplies on prices will be at least partly offset by the effect of larger consumer incomes during the remainder of 1939 and the first half of 1940, as compared with a year earlier. Smaller supplies and larger consumer incomes in the latter part of 1940 are expected to result in general improvement of the poultry and egg situation.

Feed supplies are again plentiful this year, but numbers of livestock on farms have increased so that the supply of feed per grain-consuming animal unit will be 3 percent smaller during 1939–40 than in the previous year. However, supplies per animal unit will be 8 percent above the 1928–32 average.

SINCE September the relationship between feed and egg prices has been much less favorable to producers

than a year ago or than the 1928–37 average. During September 2.4 dozen more eggs were required to purchase 100 pounds of poultry ration at Chicago prices than in 1938 and 0.7 dozen more than were required on the average for the corresponding month during 1928–37. It is expected that the relationship between feed and egg prices will continue less favorable to producers than a year earlier during the remainder of 1939 and the first half of 1940 and possibly less favorable than the 10-year average.

Because of the unfavorable feed-egg ratio, hatchings in 1940 are expected to be smaller than the large hatch of 1939. Commercial hatchings in 1939 were the largest on record, and 21 percent above 1938, but because of the continued shift from farm to commercial hatchings, total hatchings did not increase by so large a percentage.

EGG production during the first 9 months of 1939 was 4 percent larger than in 1938, the increased number of hens more than offsetting the slightly lower rate of lay per hen. On October 1, 1939, laying flocks were 4 percent larger than a year ago and are expected to continue somewhat larger than a year earlier during the first half of 1940.

As a result of the expected smaller hatch in 1940, laying flocks in the latter part of that year may be somewhat smaller than in 1939. The rate of lay per hen is expected to continue well above the 1928–37 average and about the same as a year earlier. Consequently, egg production during the first half of 1940 will probably be slightly larger than a year earlier but may be somewhat smaller in the last few months of 1940.

Storage stocks of shell and frozen eggs combined on October 1 were 12 percent, or 985,000 cases larger than on the same date in 1938. The out-of-storage movement so far this year has been about the same as last. Storage stocks usually reach a peak in August and a low point in February or March.

MARKETINGS of dressed poultry during the first 8 months of 1939 were 24 percent larger than a year earlier, largely because of increased marketings of hens and winter broilers. Marketings are expected to continue well above last year during the remainder of 1939, because of the increased number of hens and chickens on farms and the large increase in turkey production. During early 1940 farmers may market a slightly larger number of hens from their larger laying flocks. Marketings during the latter half of 1940 are expected to be smaller than in 1939 because of the prospective smaller hatch.

The heavy into-storage movement for poultry has just begun. Because of the larger supplies of poultry available, the into-storage movement is expected to be larger than in 1938 but smaller than the record high movement in 1936. Storage stocks on January 1, 1940, are expected to be larger than a year earlier. The into-storage movement during the latter part of 1940 is expected to be smaller than that in 1939.

Some further increase in the number of fall and winter broilers to be raised in the principal commercial broiler-producing areas in the East is in prospect for the coming winter unless feed costs increase further. Should any material expansion of production occur, it probably would more than offset whatever price advantage is to be gained through the more favorable demand situation.

THE number of turkeys raised this year was the largest on record—22 percent above last year and 15 percent above the previous record high year in 1936. As a result of the very large production of turkeys, prices will be lower for the crop of 1939 than for the crop of 1938. However, the effect of the larger supplies on prices will be partly offset by the effect of larger consumer incomes. Another factor that has helped to support prices in recent years has been the rapidly increasing use of turkeys throughout

the year. Large increases in production such as occurred this year have invariably been followed by recessions in production. Such a recession is to be expected next year.

Any influence which the European War may have on prices for poultry and eggs will be largely a result of its effects on our domestic economy, since it is not probable that exports of poultry meats or of eggs and egg products will increase within the next year to a sufficient extent to affect prices materially.

RICHARD J. FOOTE.

Vegetable Crops In 1940

PRODUCERS of potatoes, sweetpotatoes, and commercial truck crops in the United States probably will receive larger incomes in 1940 than in the last 2 years. Increased plantings of most of these crops are in prospect for 1940, but it is probable that an improvement in consumer demand will more than offset the effect of expanded production on incomes to producers. It is probable that prices of most of these crops, except potatoes, will average slightly higher in 1940 than in the last two seasons. The increase in the potato crop is likely to be great enough to force potato prices downward, even though demand conditions are improved in 1940.

The acreage of potatoes and of truck crops for market may be expanded only slightly in 1940, but that of truck crops for manufacture is likely to be increased considerably. The acreage of sweetpotatoes may be decreased slightly. These changes in acreages are expected to occur largely as a result of the changes in the level of prices received for the 1939 crops as compared with those of the previous year.

IT IS probable that the United States potato acreage will be increased by nearly 100,000 acres in 1940 over that planted in 1939. This increased acreage with yields equal to the average of the last 3 years would result in a potato crop in 1940 somewhat larger than in 1939. Increases in production are expected in all the important groups—the early, intermediate, and late States.

Although a larger potato crop is in prospect, income to growers may tend to rise somewhat, largely as a result of an improvement in demand. Ordinarily a larger supply of potatoes results in lower prices and incomes to potato producers, but in 1940 it is probable that the improvement in demand will be sufficient to offset this income-depressing influence. Potato prices, however, probably will be slightly lower in 1940 than in 1939 but probably will be offset by a larger volume of sales.

The 1939 potato crop, totaling 359 million bushels, was about 13 million bushels less than in 1938 and the recent 10-year average. Acreage was increased slightly, but yields declined from the relatively high level obtained in 1938. The crop in the intermediate and some of the early States was unusually small in 1939, largely because of reduced yield per acre. The late crop was slightly smaller than in 1938 in the 8 Eastern and 10 Central States but slightly larger in the 12 Western States (excluding the California early crop).

ONLY slight changes in the acreage and production of sweetpotatoes are in prospect for 1940, but it is probable that both prices and incomes to producers will be increased somewhat over 1939. The higher prices and larger incomes are expected to result largely from increased consumer income or stronger demand. In the cotton States sweetpotato production in 1940 may be little changed from 1939, but in those States producing largely for commercial market it is likely to be decreased slightly.

PRODUCTION of all commercial truck crops for fresh-market shipment as a whole in 1940 probably will be slightly larger than the record large supply produced in 1939. Improvement in demand conditions in 1940 over 1939, however, probably will result in slightly higher prices of these crops as a group and a larger total cash income to producers.

The total acreage planted to these crops probably will be increased slightly and continue the upward trend of the last two decades. Because of somewhat higher prices received in 1939 for such crops as snap beans, beets, cabbage, cantaloups, carrots, cauliflower, celery, cucumbers, eggplant, peppers, tomatoes, and watermelons, it is likely that the United States acreage of these crops in 1940 will be increased slightly over that harvested in 1939. It is probable, however, that decreases will occur in the acreage of lima beans, lettuce, onions, and green peas.

TOTAL United States acreage of commercial truck crops for fresh-market shipment increased by less than 1 percent in 1939 over 1938 and is indicated to be only slightly smaller than the record high acreage harvested in 1936. Although yields in 1939 of most crops were relatively low in some of the early, second early, and intermediate States, the index of yield per acre for all crops for the United States as a whole was about the same as in 1938. With the acreage slightly higher, production also shows a slight increase. Larger United States crops of asparagus, snap beans, cantaloups, eggplant, lettuce, onions, green peas, and spinach more than offset smaller crops of beets, cabbage, carrots, cauliflower, celery, cucumbers, peppers, tomatoes, and watermelons.

Despite the slightly larger supply, prices of truck crops for fresh-market shipment averaged somewhat higher in 1939 than in 1938. These higher prices were due largely to improved consumer demand, and they resulted in a total cash income to growers somewhat higher than received in the previous year.

SUBSTANTIAL increases in the acreages of most truck crops for manufacture in 1940 probably will be required to cover average consumption requirements in 1940–41 and provide average carry-overs. For the four major crops, green peas, snap beans, sweet corn, and tomatoes, increases in acreage of 28, 12, 50, and 28 percent, respectively, should under average growing conditions provide a tonnage sufficient for this purpose. Total supplies of processed vegetables available for consumption during the 1939–40 season are considerably less than the unusually large supplies of the last two seasons, and current wholesale prices show appreciable improvement over those of a year ago. If prices at which canners offer to contract acreage maintain their usual relationship to wholesale prices of the canned products during December and January, and if the present trend of such prices continues into those months, it is likely that the contract prices received by growers for their 1940 acreage will be generally above those of 1939.

THE planted acreage and production of 11 truck crops for manufacture in 1939 was about 20 percent below that of 1938. This decline, which was to be expected in view of the well-defined production cycle in these crops, will be reflected in an equivalent reduction in the total pack of major canned vegetables. Because of the record carry-over of canned vegetables at the beginning of the 1939–40 season, however, total supplies, though probably about 12 percent below the high level of 1938–39, exceed the recent 5-year average consumption.

GUSTAVE BURMEISTER.

creased materially in per capita production over the same period; strawberries increased rapidly during the middle of the period but are now only slightly higher than in 1919–23. Present indications are that during the next 5 seasons a larger per capita supply will be comprised of citrusfruits.

Per capita consumption in the United States has tended to follow the trend in production, and that of fresh and canned fruits has increased materially during the past 20 years. But the per capita consumption of dried fruits has decreased *slightly* during the past decade. Per capita consumption of fresh fruits increased from the average of 131 pounds in 1919–23 to 150 pounds in 1934–38 and that of canned fruits increased from 9.3 to 15.4 pounds. Per capita consumption of dried fruits decreased from 6.2 pounds in 1919–23 to 5.8 pounds in 1934–38.

As with other agricultural commodities, variations in prices received by producers of fruits are associated rather closely with variations in the two factors, total supply and consumer income. In relation to the 1924–29 level of fruit production and prices, the recent (1934–38) average production of all fruits combined is 18 percent higher, whereas the index of prices received for all fruits is 39 percent lower. The index of prices received for all farm products (1934–38 average) is about 28 below the 1924–29 level.

During this period prices of grapefruit, oranges, cherries, pears, and dried prunes decreased more than prices of other fruits. Prices of grapefruit and oranges decreased 62 and 54 percent, respectively; cherries, 50 percent; pears, 48 percent; dried prunes, 44 percent; grapes, 36 percent; apples, 31 percent; strawberries, 30 percent; peaches, 26 percent; apricots, 25 percent; olives, 20 percent; and plums and fresh prunes, 18 percent. The 1934–38 average of cranberry prices was the same as the 1924–29 average.

The influence of consumer income on fruit prices in recent years has probably been of more importance than variations in supplies of fruit.

Reginald Royston,
Agricultural Marketing Service.

Horse, Mule Population Declines

Less demand for work stock, a falling off in colt production in 1938, and inroads of disease plus a high death rate from old age, all point to a further decrease in the combined number of horses and mules on farms. The exact time when the decrease in numbers will be halted cannot be determined at this time, since it is impossible to judge accurately the future volume of colt production.

Farmers' decisions as to the relative returns from colt raising compared with other livestock production, and their future interest in replacing animal power with tractor power, are important factors in the situation. Exports of horses and mules at present are too small to be a factor in reducing numbers, but a prolonged war in Europe may create an increase in export demand.

The number of work stock on farms has been decreasing since 1913. About 1932 prices of horses and mules began to strengthen and colt production began to increase. Increases in colt production during 1932–37 slowed the rate of decrease in horse and mule numbers but not enough to stop the downward trend. In 1938 the upward trend in colt production was reversed, and at the end of the year there were on farms 6.5 percent fewer colts under 1 year of age than in 1937.

The small, high-speed, single-plow type of tractor is now invading the heretofore stronghold of the farm horse in areas of small farms.

M. R. Cooper.

Plus Signs on Measures of Demand

PLUS signs have been added to practically all the basic measures of domestic demand during the last few months. Gains have been substantial in important measures such as industrial production, residential building, factory employment and payrolls, and national income. Weekly indexes of industrial activity through the first half of October continued the upward trend, though at a somewhat slower rate than during October.

Residential building—measured by the Federal Reserve index—increased in September to the highest point in 10 years. Factories processed about 10 percent more farm products this September than last, and the volume derived from nonagricultural products was one-third larger than in September 1938. The rise in nonagricultural employment between May and September this year exceeded the usual seasonal rise by more than 600,000 employes, or about 2 percent. The rise in industrial production was about 20 per cent.

The large bank of orders on the books of steel, railway equipment, machinery, textile and paper industries is apparently sufficient to maintain a high rate of industrial activity through the remainder of this year. And from now on any additional gains in output will be accompanied by relatively greater increases in employment. Continued improvement in domestic consumer demand for agricultural products is in prospect the remainder of this year.

Measures of Domestic Demand

[1924-29=100]

Item	September				Percentage change		
	1929	1933	1938	1939	1938-39	1933-39	1929-39
National income	109.1	64.7	89.0	92.8	+4	+43	−15
Nonagricultural income:							
Total	109.9	66.1	90.1	94.8	+5	+43	−14
Per capita	104.2	61.0	79.7	83.5	+5	+37	−20
Factory pay rolls:							
Total	110.7	59.4	79.0	90.7	+15	+53	−18
Per employed wage earner	103.7	72.1	88.4	93.2	+5	+29	−10
Industrial production:							
Total	113.3	78.6	85.2	103.0	+21	+31	−9
Factories processing farm products	107.0	99.7	102.9	111.6	+8	+12	+4
Other factory production	116.0	67.1	74.4	98.2	+32	+46	−15
Construction activity:							
Contracts awarded:							
Total	90.9	24.8	64.5	65.3	+1	+163	−28
Residential	65.4	10.7	50.1	65.4	+31	+511	(2)
Employment in production of building materials	94.4	44.1	59.8	66.7	+12	+51	−29
Cost of living:							
Food	104.0	69.3	75.8	76.0	(1)	+10	−27
All other items	97.9	83.1	85.6	86.0	(1)	+3	−12
Purchasing power of nonagricultural income per capita:							
For food	100.2	88.0	105.1	110.0	+4	+25	+10
For all other items	106.4	73.4	93.1	97.1	+4	+32	−9

[1] Less than ½ of 1 percent.
[2] No change.

NOTE.—All indexes adjusted for seasonal variation except "Cost of living."

General Trend of Prices and Wages

[1910-14=100]

Year and month	Wholesale prices of all commodities [1]	Industrial wages [2]	Prices paid by farmers for commodities used in [3]— Living	Production	Living and production	Farm wages	Taxes [4]
1920	225	222	222	174	201	242	244
1921	142	203	161	141	152	155	259
1922	141	197	156	139	149	151	261
1923	147	214	160	141	152	169	266
1924	143	218	159	143	152	173	265
1925	151	223	164	147	157	176	270
1926	146	229	162	146	155	179	271
1927	139	231	159	145	153	179	277
1928	141	232	160	148	155	179	279
1929	139	236	158	147	153	180	281
1930	126	227	148	140	145	167	277
1931	107	208	126	122	124	130	253
1932	95	179	108	107	107	96	219
1933	96	172	109	108	109	85	187
1934	109	183	122	125	123	95	178
1935	117	192	124	126	125	103	180
1936	118	200	122	126	124	111	182
1937	126	215	128	135	130	126	187
1938	115	207	122	124	122	124	----------
July	115	205	----------	----------	123	129	----------
August	114	209	----------	----------	122	----------	----------
September	114	214	121	122	121	----------	----------
October	113	212	----------	----------	121	126	----------
November	113	207	----------	----------	121	----------	----------
December	112	212	120	122	120	----------	----------
1939—January	112	211	----------	----------	120	117	----------
February	112	213	----------	----------	120	----------	----------
March	112	218	119	122	120	----------	----------
April	111	211	----------	----------	120	121	----------
May	111	210	----------	----------	120	----------	----------
June	110	213	119	121	120	----------	----------
July	110	213	----------	----------	120	126	----------
August	109	217	----------	----------	119	----------	----------
September	115	214	122	123	122	----------	----------
October	115	----------	----------	----------	[5] 122	126	----------

Year and month	Index of prices received by farmers [August 1909-July 1914=100] Grains	Cotton and cottonseed	Fruits	Truck crops	Meat animals	Dairy products	Chickens and eggs	All groups	Ratio of prices received to prices paid
1920	232	248	191	--------	174	198	223	211	105
1921	112	101	157	--------	109	156	162	125	82
1922	106	156	174	--------	114	143	141	132	89
1923	113	216	137	--------	107	159	146	142	93
1924	129	212	125	150	110	149	149	143	94
1925	157	177	172	153	140	153	163	156	99
1926	131	122	138	143	147	152	159	145	94
1927	128	128	144	121	140	155	144	139	91
1928	130	152	176	159	151	158	153	149	96
1929	120	144	141	149	156	157	162	146	95
1930	100	102	162	140	133	137	129	126	87
1931	63	63	98	117	92	108	100	87	70
1932	44	47	82	102	63	83	82	65	61
1933	62	64	74	105	60	82	75	70	64
1934	93	99	100	103	68	95	89	90	73
1935	103	101	91	125	118	108	117	108	86
1936	108	100	100	111	121	119	115	114	92
1937	126	95	122	123	132	124	111	121	93
1938	74	70	73	101	114	109	108	95	78
July	72	71	79	99	123	101	103	95	77
August	62	69	78	92	115	102	105	92	75
September	63	69	75	107	117	104	118	95	79
October	60	72	70	107	111	107	124	95	79
November	60	73	71	102	111	109	131	94	78
December	63	70	73	108	109	112	127	96	80
1939—January	66	71	76	96	112	109	97	94	78
February	66	70	78	108	116	107	91	92	77
March	66	71	81	114	116	100	88	91	76
April	67	70	82	102	114	95	87	89	74
May	72	72	85	110	112	92	85	90	75
June	73	73	93	105	107	94	83	89	74
July	66	73	80	101	107	96	89	89	74
August	64	71	70	101	101	100	90	88	74
September	83	76	73	114	117	107	102	98	80
October	77	74	73	128	112	112	108	97	[5] 80

[1] Bureau of Labor Statistics Index with 1926=100, divided by its 1910-14 average of 68.5.
[2] Average weekly earnings, New York State factories. June 1914=100.
[3] These indexes are based on retail prices paid by farmers for commodities used in living and production reported quarterly for March, June, September, and December. The indexes for other months are interpolations between the successive quarterly indexes.
[4] Index of farm real estate taxes per acre. Base period represents taxes levied in the calendar year 1909-13, payable mostly within the period Aug. 1, 1909-July 31, 1914.
[5] Preliminary.

U. S. GOVERNMENT PRINTING OFFICE: 1939